

Australian Standard™

**Guide to the sampling of particulate materials**

**Part 6: Inspection of mechanical sampling systems**



**S t a n d a r d s** Australia

This Australian Standard was prepared by Committee MN-010, Sampling of Minerals. It was approved on behalf of the Council of Standards Australia on 15 September 2000 and published on 27 December 2000.

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The following interests are represented on Committee MN-010:

Australasian Institute of Mining and Metallurgy  
Australian Coal Association  
Chamber of Minerals and Energy of Western Australia  
CSIRO Mathematical and Information Sciences  
CSIRO Minerals

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**Part 6: Inspection of mechanical sampling systems**

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## PREFACE

This Standard was prepared by the Standards Australia Committee MN-010, Sampling of Minerals.

This Standard was prepared with reference to ASTM D 4702-91, *Standard guide for inspecting crosscut, sweep-arm, and auger mechanical coal sampling systems for conformance with current ASTM Standards*.

The term ‘informative’ has been used in this Standard to define the application of the appendices to which it applies. An ‘informative’ appendix is for information and guidance only.

The objective of this Standard is to provide users of new and existing mechanical sampling systems for minerals with guidance on their operation and inspection.

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## STANDARDS AUSTRALIA

### Australian Standard

## Guide to the sampling of particulate materials

### Part 6: Inspection of mechanical sampling systems

#### 1 SCOPE

This Guide sets out recommended practices for the inspection of mechanical sampling systems. This Guide serves as a reference for conformance with applicable Australian Standards.

This Guide covers general considerations including precision, mineral variability and bias; establishment of inspection systems and inspection procedure.

#### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 4433 Guide to the sampling of particulate materials
- 4433.1 Part 1: Sampling procedures
- 4433.3 Part 3: Estimating sampling precision

#### 3 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 4433.1 and those below apply.

##### 3.1 Audit

A critical review of a mechanical sampling system, undertaken by a person not directly involved in the operation of that system, which measures its compliance with stipulated operating specifications.

##### 3.2 Mechanical inspection

A comparative record of observations and measurements of physical parameters against design criteria undertaken by a suitably qualified inspector.

##### 3.3 Operational inspection

A record of observations and inspections undertaken by the operator during sampling of a consignment. The operator is the person taking the sample.

#### 4 SAFETY

This Standard does not purport to address safety issues that may be associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices in line with site safety regulations and Occupational Health and Safety Acts in the relevant States of Australia. It is highly recommended that clear safety and maintenance instructions be provided to operators in the event of a breakdown. If parts of a system are used as a manual back-up, the parts not in use are to be clearly isolated according to site requirements.